

Title (en)

Method for producing metal zirconium industrially and producing low-temperature aluminum electrolyte as byproduct

Title (de)

Verfahren zur industriellen Herstellung von Zirkoniummetall und zur Herstellung eines Niedrigtemperaturaluminiumelektrolyts als Nebenprodukt

Title (fr)

Procédé pour produire industriellement du zirconium métallique ainsi que de l'électrolytique d'aluminium à basse température comme sous-produit

Publication

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Application

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Priority

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Abstract (en)

[origin: US2013091988A1] The invention provides a preparation method for producing metal zirconium industrially and producing low-temperature aluminum electrolyte as byproduct, which comprises the following steps: A) aluminum and fluorozirconate are put in a closed reactor, inert gas is fed into the reactor after evacuation, the reactor is heated up to 780° C. to 1000° C. and then the mixture in the reactor is stirred rapidly; and B) after reaction continues for 4 to 6 hours, the liquid molten at the upper layer is sucked out to obtain low-temperature aluminum electrolyte, and the product at the lower layer is subjected to acid dipping or distillation to remove surface residue to obtain metal zirconium.

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